

inasmuch as they imply that the rates to be offered will be lower than those normally available to a member from his usual travel office, are highly deceptive and even border on fraud.

To quote further from the form letter, "Please note that cheques (sic) for flight arrangements to and from New York should be made payable to GALATTI TRAVEL SERVICE, INC. and mailed directly to this agency." Despite what I assume are the good intentions of APS, the only one who stands to gain from these arrangements is the Galatti Travel Service, and I do not believe that it is appropriate for our professional society to promote the enrichment of a particular travel agency.

W. BRUCE RICHARDS
Oberlin College

APS REPLIES: The American Physical Society, as well as the American Institute of Physics, receives a constant flow of inquiries from society members about travel arrangements and fares in connection with the society's meetings. In the interests of economy the society maintains a very small staff in its headquarters, and this staff is illequipped to provide answers to these questions from the standpoint of both workload and competency. To be more responsive to member needs, after thorough investigation, APS asked Galatti Travel Service if they would answer this correspondence and be more helpful than the society could be. This was accepted on a trial basis by both Galatti and APS.

As Richards points out, the best nominal all-purpose air fare currently available for continental US travel is the "Discover America" plan — although, in some circumstances when traveling as a large family group, the "Family Plan" might be even better. We find it surprising that many regular air travelers are not fully cognizant of the great assortment of excursion fares open to them. In any case, it should be common knowledge that air rates are set and controlled by government agreement, and no one agency or airline has a monopoly on exclusively low general fares. Contrary to Richards' interpretation of the *Bulletin* announcements, these excursion fares are available to all those who seek *guaranteed* transportation from any recognized travel agency; the announcements should be construed only as generally informative in this respect. What is intended is that APS

commends the Galatti Travel Service to the attention of the members, if they should desire to book reservations through the society. We feel that this is a fair quid-pro-quo in exchange for the nonremunerative advisory service to members that they provide, particularly since it decreases staff overhead and workload.

Recent discussions with Galatti officers have revealed that the volume of administrative work involved in answering APS inquiries is nowhere near compensated by what little sales are generated. This was an experiment for both Galatti and APS, and it is quite possible that Galatti will now withdraw from the arrangement unless some other more equitable arrangement can be developed. We can assure Richards that APS has caused no "enrichment" for Galatti to date — more to the contrary, in fact.

The society is continuing to explore with Galatti and other agencies plans that will provide better travel arrangements and less expensive transportation for APS members without making administrative costs for the APS prohibitive.

WILLIAM W. HAVENS JR.
Executive Secretary, APS

Who found xi starred?

The item "New Cascade Particle Completes 5/2- Octet," which appeared in the "Search and Discovery" section of *PHYSICS TODAY* (December, page 55), is incorrect and misleading in several respects. Jean Alitti and his coworkers (*Phys. Rev. Letters* 21, 1119, 1968) are given credit for discovery of Ξ^* (1930) when in fact evidence for a Ξ^* state at this mass was first obtained by J. Badier and his group (*Phys. Letters* 16, 171, 1965) several years ago and subsequently by G. A. Smith and J. S. Lindsey (*Proceedings of the Athens Second Topical Conference on Resonant Particles*, Ohio University Press, Athens, Ohio, 1965, p. 251). Alitti et al have now confirmed the earlier observations with comparable statistics using a reaction free of overlapping resonance bands.

The interpretation of Ξ^* (1930) as a member of an SU(3) octet with $J^P = 5/2^-$ is a speculation (as acknowledged by Alitti et al) made by several people (see for example *Nucl. Phys.* B3, 10, 1967) on the basis of the masses and decay widths of the observed baryons. The J^P of Ξ^* (1930)

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has not been measured; we do not regard the $5/2^-$ octet as being particularly "well established."

In the letter of Alitti and colleagues both abstract and text claim a discovery and a new conjecture, but at least in their footnotes they admit that this is not so. The *PHYSICS TODAY* news story accepts these claims without qualification. The letter was already misleading; your story was just wrong.

PHILIP DAUBER, ARTHUR H. ROSENFELD, GERALD R. LYNCH, CHARLES G. WOHL
University of California, Berkeley

A REPLY FROM BROOKHAVEN: In response to the negative remarks of Dauber, Rosenfeld, Lynch and Wohl concerning the short item, "New Cascade Particle Completes $5/2^-$ Octet," we will restrict our comments to their reference to the *Physical Review Letter* of Alitti et al.

(a) The *Physical Review Letter* of Alitti et al was far from misleading. It is clearly and unambiguously stated, "The earlier data, although suggestive, were far from convincing because of limited statistics and difficulties with interference effects. The inconclusive nature of the old data is also indicated in the latest compilation by Rosenfeld et al."¹ The importance of the present experiment is that it has a much greater statistical validity than the experiment of Badier et al and is free from the systematic difficulties of the experiment of Smith et al (as partially acknowledged by Dauber et al).

(b) It should be noted that essentially the same Berkeley data have been interpreted by the same authors in two different ways: (1) as evidence for a $\Xi(1820)$ (Dubna Conference 1964)² and (2) as evidence for a $\Xi(1930)$ (Athens Conference 1965).³ We believe that data that allows such flexibility of interpretation is certainly not conclusive. This conclusion is reinforced by the existence of an enormous time lag between the availability of the Berkeley Ξ data, 1965, and its publication in *The Physical Review* or *Physical Review Letters*, 1969.

(c) Concerning the question of the $5/2^-$ octet, we must again refer to Rosenfeld's compilation.¹ Here the $N(1680)$, $\Lambda(1827)$ and $\Sigma(1765)$ are

noted to have $J^P = 5/2^-$. With the addition of the $\Xi(1930)$ one notes that the Gell-Mann-Okubo mass formula is satisfied and that nine experimental decay rates are fitted rather well by three parameters in the $SU(3)$ formulation of the octet. To quote Alitti et al, "An application of the Gell-Mann-Okubo mass formula suggests that it is a member of a $J^P = 5/2^-$ baryon octet and detailed $SU(3)$ study of the total and partial widths of the member states seems to give a reasonable overall consistent picture." If one is not convinced of the existence of the octet unless the $\Xi(1930)$ spin and parity are also measured then the present experiment clearly cannot convince Dauber et al of the existence of the $5/2^-$ octet. On the other hand, we note that these same men did not take exception to the existence of the $3/2^+$ decuplet noted in the same *PHYSICS TODAY* item although the spin of the Ω^- has yet to be measured.

With respect to the actual *PHYSICS TODAY* item, we believe the use of "established the existence of" instead of the word "found" may be a more precise and less controversial way of "telling it how it really was."

References

1. *Review of Particle Properties*, UCRL 8030, August 1968.
2. *Proceedings of the 12th International Conference on High Energy Physics* (Dubna, 5-15 August 1964) page 600.
3. *Proceedings of Athens Second Topical Conference on Resonant Particles* (10-12 June 1965) page 251.

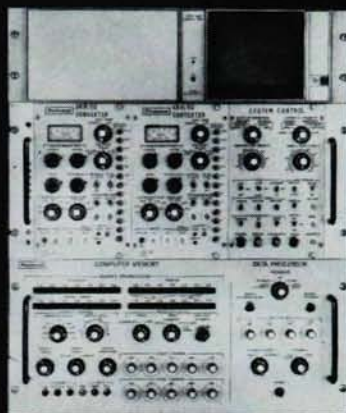
R. RONALD RAU
NICHOLAS P. SAMIOS
Brookhaven National Laboratory

Citations and evaluation

In a letter to *PHYSICS TODAY* in 1953,¹ M. J. E. Golay proposed the preparation of a referenced-author index, or what is now known as a "citation index," as a tool for bibliographic search and as a means of dealing with "one of the knottiest tasks faced by scientific management, namely the problem of evaluating published research results." Doubtless many are aware of the existence of the *Science Citation Index*, which has been published annually since 1964 by the Institute for Scientific Information of Philadelphia. It is the particular purpose of this let-

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